

The Mary Ann



A Fokker Dr.I and Sopwith Camel over the skies of Masterton, New Zealand, April 2013

THE MILLIONAIRES' UNIT NEWSLETTER

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FINISHING FUND CHALLENGE GRANT RECEIVED

We are pleased to announce that in late June we received an anonymous challenge grant, which when met will put us in striking distance of finishing the film. Contributors have already stepped up to meet this challenge, but there is still a substantial amount to raise to meet the goal. The pledge is a strong endorsement for the project, and with it we hope to complete post-production early in the new year. Please contact us directly if you would like to contribute. Contact Ron at ron@millionairesunit.org or 310-384-8104.

MUSICAL SCORE CHALLENGE GRANT MET

We're also excited to announce that the challenge grant issued in January by two generous donors for the express purpose of creating an original musical score for the film has been met! With these funds we have hired a music supervisor and are in the process of finalizing a contract with a very talented composer. Details to come soon!

LOCATION FILM PRODUCTION COMPLETE

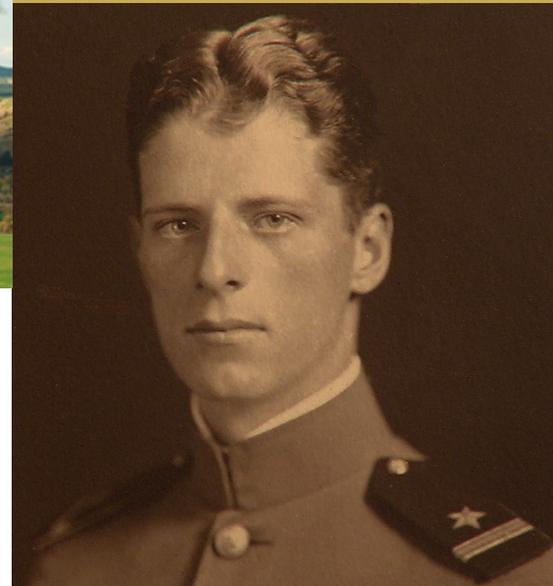
Following the successful shoot in New Zealand at The Vintage Aviator, the production team has finished all major location film production. Additionally, the filmmakers have delivered a two-hour rough-cut to our PBS supporter WNET-13, New York, for review. Post production work remaining to be done includes casting and recording the narrator and actors, finishing digital compositing, finalizing graphics, licensing archival footage and orchestrating the final sound mix.

The Millionaires' Unit visits New Zealand

by Darroch Greer

As most of you who have attended our work-in-progress screenings know, The Millionaires' Unit film team has long needed to shoot a Sopwith Camel for the climax of the documentary. David Ingalls won his

designation as the navy's only flying ace from World War I with six kills in a Camel, and Kenneth MacLeish, in the last weeks of the war, lost his life in a Camel. Our dream finally came true in the skies over Masterton, New Zealand, this past April. That's how far Ron King, Harry Davison and I had to travel to find a lead pilot and a team with the willingness,



George F. Lawrence Naval Aviator #89

George "Lotta" Lawrence served first with the Yale Battery before joining the Unit. He served at Squantum and Rockaway, NY, before being sent to Fort Worth, Texas, for advanced training, then on to Hampton Roads, VA. Lawrence served overseas at Killingholme, England, where he participated in bombing runs on U-boats and chased zeppelins. Read more about the members of the First Yale Unit on our [People page](#).



expertise and dedication to execute a complex shoot air-to-air. Curiously, our destination was on the exact opposite side of the world from where the events we needed to depict took place.

The Vintage Aviator, Ltd., has a large workshop in Wellington where they build exact replica WWI aircraft, and an aerodrome an hour NE where they fly some two-dozen aeroplanes, many with original engines. Their production manager and chief pilot is Gene DeMarco who is from, ironically, Huntington, Long Island – the very town in which the First Yale Unit trained to become naval aviators. The waters of the sandy beach where young Gene played are the same that washed the castor oil off the hull of the “Mary Ann”! Gene and his team of pilots, as well as our local film crew, could not have been more welcoming or helpful as we attempted to translate the shots we envisioned for the film into the nuts & bolts of coordinating a Sopwith Camel, two SE5s, a Fokker DVII and three Dreideckers, a helicopter, a Cessna and seven cameras – not quite all at once, however.

We rented two state-of-the-art Red Cameras. Ron shot with one from the ground, while Richard Bluck (Peter Jackson’s 2nd unit cameraman) shot with the other hanging out of a Cessna using a Tyler Mini-gyro, and from a helicopter using a newly-developed Shotover camera mount that could move 360 degrees. I directed from the helicopter and the ground while Harry shot making-of footage for the documentary on the documentary and recorded the sound of the engines as the planes took-off and landed. We also ate a lot of lamb.

One builds a story on film the way you do in a book: establishing shot/setting the scene; different points-of-view; details of cause and effect. I broke down and elaborated the action scenes we wanted to illustrate, and Ron and I created detailed shot lists. These, in turn, had to be broken up by individual aircraft as well as between shooting platforms: helicopter, Cessna, ground or POV. Small GoPro cameras mounted on the planes and pilots would cover the point-of-view

shots. Once we were on the ground in Masterton, we had to coordinate between the three pilots and the cameramen to make sure these plans all made sense up in the air.

We also had to coordinate with the weather, and after a dry, calm New Zealand summer, the fall weather was kicking up with wind and rain over several days – some of it too drastic for the delicate aircraft, particularly our star, the Camel with the original Gnome engine. This was our first inkling of what our WWI pilots faced. I decided to go up with the helicopter on its first flight, promising Ron that I would not get in the

way of the pilot and cameraman. After I got over the thrill of moving through the sky next to a WWI fighter, I realized some direction was called for. Gene took his Camel into a screaming dive that scattered the sheep on the ground, and I politely asked our pilot to follow him. As Robert Lovett says in the film, “Exciting? Ye Gods!”



Darroch Greer (in cap) directs pilot Gene DeMarco (center) and cameraman Richard Bluck on location.

The results of all our planning and expense were apparent quickly as we looked at the footage between each 30-minute flight. From the Cessna the camera could only shoot in a 70-degree range angled to the rear. Essentially, the WWI aircraft had to move into that space and execute their maneuvers. The camera in the Shotover mount from the helicopter could follow the planes nearly everywhere, but our time with the helicopter was limited by expense. The revelation, however, was from the GoPros. Though the resolution is not nearly as good as the Red Cameras, the visceral feel of being on the aircraft is inimitable. It took some experimenting to attach the cameras to the planes with minimal vibration, but placing the camera on the helmet and chest of the pilot achieved what Ron and I always wanted – the feel of flying a WWI aircraft.

The jump that this footage allows the film to make it quite a big step. Scenes that were formally black & white, using archival and old movie footage as placeholders, are now vivid color with beauty and immediacy. We interviewed Gene DeMarco, as well as Javier Arango, chief pilot of the Aeroplane Collection in California, about what it takes to fly

these delicate and sophisticated planes, and what the First Yale Unit aviators would have been up against in battle. Since Ron and I started production some six years ago, one of our goals has been to convey as closely as possible what it was like to fly a WWI single-seater fighter, and we have used every tool we could find to tell this historical story of military aviation with verisimilitude, emotion and drama. From our trip to New Zealand, we feel we have achieved that goal. I should add that it was because of you, our support-

ers, that we were able to execute such a complicated and extravagant shoot. We received preferential treatment and discounts from everyone involved – helicopter, camera mounts, crew and pilots – all because we were working with Gene and the The Vintage Aviator crew on a subject we all love and the telling of which we think is historically important. From what I can tell, we now have the most complete footage of what was the WWI aviation experience. You will soon see it all in a feature documentary.

Authenticity

by Harry Davison

Moviemaking technology is so good these days that sometimes it's hard to decide what is plausible. Audiences are willing to make a Faustian bargain in which they suspend disbelief in exchange for excitement that keeps them on the edge of their seat. It's only when the action is so poorly executed, or the premise is just too ridiculous that a film falls flat by losing the last shred of credibility. Admit it: you've occasionally tested this hypothesis when you've tried to see if you could hold your breath for as long as the hero on screen is able to stay under water without drowning. I have.

From the beginning, we've tried to make our documentary film faithful to reality without sacrificing any of the sense of adventure that is an important part of the story. In order to forge a personal connection between the audience and our heroes, we revealed the intimate feelings contained in the letters the Unit members wrote to their loved ones. The honest expression of emotion in their words, and their extraordinary ability to articulate themselves at such a young age is nothing less than wondrous. But words alone are not enough to rise to the level of their endeavors. So, more than just being faithful, we have also tried to amplify the connection with the audience by being authentic in our representation as well.

The movie camera arrived on the scene a few years before the beginning of WWI. In those days, silent movies were shot at slower speeds than today's movies and were initially hand cranked. Film speed was

controlled by the cameraman counting "one Mississippi, two Mississippi" under his breath as he rotated the handle. As a result, the action was captured at anywhere from 12 to 22 frames per second, while today it is a standard 24fps. In some ways this could be considered a virtue. The rhythm of the film was like the tempo of a song, with the film speeding up for car chases and action scenes. The excitement of the cameraman was often a natural part of the process, as adrenaline stoked his excitement running the film faster as he saw airplanes lift off through the viewfinder. On the battlefield, the movie camera captured for the first time the unrelenting destructive consequences of awesome machines of war such as the tank and the machine gun. We watch old black and white film in wonder as aircraft taxi and take-off in a single linear burst of action. With the help of the movie camera, audiences are now drawn in to the action and engaged as never before, hypnotized and slack jawed by the earliest moving images, and left with the feeling that they are eye witnesses to history as it unfolded.

The photographer Phil Makanna has produced a book about WWI vintage airplanes that is worthy of anyone's coffee table. And though the images are spectacular indeed, what is truly striking about his effort to capture the essence of these old war birds is that he has imbedded a DVD in the cover of the book on

which he recorded the sound of the engines of the very same airplanes that he photographed. As you flip the pages with the sound in the background, the images spring to life not just on the page but in your imagination as well. Inspired by this example, we



Producer Harry Davison doubling as sound tech in New Zealand.

resolved early on to incorporate as much authentic sound as possible in our film. Thanks to the archives at Yale University, for example, we have a recording of the Whiffenpoof song from 1915, sung a cappella by the same young men who would have performed on campus at the time the members of the First Yale Unit were students. From the first note that wavers ever so slightly under pressure from having to open one of the most iconic of Ivy League anthems, the melody transports you back in time and inspires and delights you in exactly the same way it would have on the Yale campus a hundred years ago.

When you see a vintage airplane in person for the first time, you experience an irresistible urge to touch it. Everything about it seems to be a contradiction in terms. Two sets of wings stretch impossibly far from each side without any visible means of support and a monstrous power plant of sculpted iron sounds like an angry dragon at full throttle threatening to tip the whole airplane forward onto its nose.

While it sits on the ground it's hard to believe that this combination of fragile engineering and raw power can actually fly. These early combustion engines don't throb with reassuring consistency; they spit and buck with alarming irregularity. The controls are rough and imprecise, tending more towards switches and valves that must be flipped on and off---as opposed to buttons and dials that ease smoothly into place. One pilot described operating the throttle on a Sopwith Camel akin to driving a car down the main street in town with your foot on the gas pedal while turning the ignition key on and off. Given enough time, a pilot can learn to sail through the air, but at the outset it must feel a bit like an epileptic fit in the middle of a high wire act.

To convey the sense that the pilot was constantly fighting for control of the airplane, we wanted to capture both the varying qualities of the engine, and the sound of metalworking on metal from the running guy wires, jerky pedals and stubborn valve switches. We planted digital recorders in the cockpit out of the way of the wind, and used a boom microphone on the ground as the planes flew or taxied by. At times it can be an assault on the senses, but you can easily imagine that in the hands of a skilled pilot it becomes a symphonic cacophony.

Technology has also brought us the unique opportunity to put the audience in the pilot's seat using miniature cameras in strategic locations such as on the guns, wing struts and even the rudder. Known as POV (point-of-view), these close-in shots allow us to

engage audiences by letting us see what the pilot is actually looking at when he flies. The first time we did this, our director of photography literally got into the front of the airplane with a traditional shoulder camera, and unfastened his safety belt so he could turn to kneel on his seat once the plane was airborne and capture images looking backwards. At Lake Keuka, where we filmed a Curtiss E-Boat, we mounted a smaller GoPro Video camera on the pilot's helmet, and learned where he looked as he flew and then landed the plane on the water. In New Zealand, we even attached a GoPro to the pilot's chest to get a view from inside of the cockpit to see how he handled the plane. By marrying these images with the sounds that we captured inside the cockpit, we hope to convey a sense of the excitement and physical rigor of flying one of these early fighter planes.

Marc Wortman's book, *The Millionaires' Unit*, was the catalyst that brought the producers together and inspired us to embark on this project. We did so in part because of the inherent limitations of the written word to convey the force of the story. We believe that as documentary filmmakers, we have the advantage of sound, motion and speech to make this more of a sensory experience. With some skillful editing, where the audience sees the pilot in one frame, and then sees what the pilot sees in another, we can actually put you in the pilot's seat. We suspect that many of the people who will be attracted to our film will already be interested in aviation. We will consider ourselves successful storytellers if you leave the film believing that you could fly.



Ron King and Harry Davison at The Vintage Aviator, Ltd., Masterton, New Zealand in April, 2013.



The film crew following the successful air to air shoot in Masterton, New Zealand. April, 2013.



RECENT SCREENINGS

June 24th - Cradle of Aviation Museum

The filmmakers were proud to help celebrate the induction of Yale Unit founder F. Trubee Davison into the aviation hall of fame at the museum by providing clips from the documentary to run in the museum foyer throughout the ceremony. "The DVD looked great" enthused Carol Nelson, Director of Development and Marketing at the museum.

October 4th - Mashomack Club

Producer Harry Davison presented a preview of the film and conducted a Q&A session as part of the club's "Artists, Writers, and Explorers, Occasional Series".



October 30th - Locust Valley Library

Author Marc Wortman presented a talk on his book, *The Millionaires' Unit*, and graciously agreed to screen some short clips from the documentary for his audience.

October 30th - Piping Rock Club

Producer Harry Davison presented a preview of the film and conducted a Q&A afterwards for assembled guests.

The Millionaires' Unit is a production of Humanus Documentary Films Foundation, an educational 501(c)(3) nonprofit company dedicated to producing documentary films about historically significant people and events.